

ApeosWare Management Suite 2 Operating Environment

Operating Environment of Entry Edition

Item	Description
Supported Operating System *1	Windows 10 Pro (32bit) ^{*2} Windows 10 Pro (64bit) ^{*2 *3} Windows 10 Enterprise (32bit) ^{*2} Windows 10 Enterprise (64bit) ^{*2 *3} Windows 10 Education (32bit) ^{*2} Windows 10 Education (64bit) ^{*2 *3} Windows 8.1 Pro Update (32bit) ^{*2} Windows 8.1 Pro Update (64bit) ^{*2 *3 *4} Windows 8.1 Pro (32bit) ^{*2} Windows 8.1 Pro (64bit) ^{*2 *3 *4} Windows Server 2016 Standard (64bit) ^{*3 *5 *6} Windows Server 2016 Datacenter (64bit) ^{*3 *5 *6} Windows Server 2012 R2 Standard (64bit) ^{*3 *4 *6} Windows Server 2012 R2 Datacenter (64bit) ^{*3 *4 *6} Windows Server 2012 Standard (64bit) ^{*3 *6}
CPU	[Windows Server 2016, Windows Server 2012 R2, Windows Server 2012] Minimum: Intel® Xeon® E5506 2.13 GHz or equivalent (4 cores and above) ^{*7} Recommendation: Intel® Xeon® X3450 2.67 GHz or equivalent or higher (4 cores and above) [Windows 10, Windows 8.1] Intel® Core™ 2 Duo 2.0 GHz or equivalent or higher (2 cores and above)
Hard disk capacity *8 *9	[When Flow Management Option is not added] System Drive: 20 GB or more Installation Drive: 10 GB or more Data Storage Drive: 70 GB or more [When Flow Management Option is added] System Drive: 35 GB or more Installation Drive: 15 GB or more Data Storage Drive: 100 GB or more
Memory capacity	See the table at the below
Network	Protocol: TCP/IP
Display	XGA (1024 x 768 pixels and above), Full Colour
Web Service	Internet Information Services 10.0 Internet Information Services 8.5 Internet Information Services 8.0
Required hardware	DVD-ROM Drive
Required software	Microsoft .NET Framework 4.6 (for Microsoft SQL Server 2016) ^{*10} Microsoft .NET Framework 4.5.2 (except for Microsoft SQL Server 2016) ^{*10} Microsoft .NET Framework 3.5.1 (for Windows 10, Windows 8.1)

Item	Description
	Microsoft .NET Framework 3.5 [Service Pack 1] (for Windows Server 2016, Windows Server 2012 R2, Windows Server 2012)
	Microsoft SQL Server 2016 Standard (64bit) [Service Pack 2]
	Microsoft SQL Server 2016 Express (64bit) [Service Pack 2]
	Microsoft SQL Server 2014 Express (32bit) [Service Pack 3]
	Microsoft SQL Server 2012 Standard [Service Pack 4] ^{*11 *12}
	Microsoft SQL Server 2012 Express [Service Pack 4] ^{*11 *12}

- *1: Installation cannot be performed in the OS where domain controller is running.
Installation cannot be performed in the OS which supports Intel® Itanium® Processors.
If you want to create a PC in a virtual environment, assign the same resources as above "Hardware". Even if you assign the same resources as above "Hardware", you may see performance degradation depending on the operating circumstances of the host PC.
- *2: Multi-touch feature is not supported. The operations of features other than "Device Management", "User Management", "Job Log Management", "Accounting Report Creation", "Document Delivery by Flow", "Server Monitoring" are not guaranteed.
- *3: For 64-bit versions, ApeosWare Management Suite 2 software will run on WOW64 (Windows 32-bit on Windows 64-bit) emulation layer subsystem.
- *4: When installing and using Microsoft SQL Server 2016, it is necessary to apply Windows Updates KB2919442 and KB2919355 in advance to the OS.
- *5: Nano Server Option is not supported. When installing the OS, do not select Nano Server Option.
- *6: Server Core Option is not supported. When installing the OS, do not select Server Core Option.
- *7: Performance may be degraded when large amounts of data are handled.
- *8: If the same disk drive is used for multiple drives, the disk space required will be the sum of those drives.
- *9: Capacity is calculated for data of one month (8 hours/day x 20 days). Increase hard disk space or back up some operation logs to a different storage medium as needed.
- *10: Pre-installed version is supported if compatible newer Microsoft .NET Framework version is pre-installed on supported OS.
- *11: Apply Service Pack of same language as SQL Server. The SQL Server Express (x86) that comes bundled with the product package is the English Edition. Please apply the corresponding English Service Pack.
- *12: If your OS is 64-bit and SQL Server 2012 is 32-bit, after applying Service Pack, install the following 64-bit Microsoft SQL Server System CLR Types (x64) [File Name: ENU\x64\SQLSysClrTypes.msi] from Microsoft SQL Server 2012 Feature Pack.
- Microsoft SQL Server 2012 SP4 Feature Pack:
<https://www.microsoft.com/en-US/download/details.aspx?id=56041>

Required memory capacity for the operating environment of Entry Edition [Windows Server 2012 / Windows Server 2012 R2 / Windows Server 2016]

Item	Description	
	2 GB or larger	4 GB or larger
None	Possible to perform ^{*1}	Possible to perform
If Cost Recovery Option is used	Impossible to perform	Possible to perform
If Print On Demand Option is used	Impossible to perform	Possible to perform

Item	Description	
	2 GB or larger	4 GB or larger
If Flow Management Option is used	Impossible to perform	Possible to perform ^{*2}

*1: 4 GB or more is required if any of the following is used.

- Print Management
- Scan Settings

*2: 8 GB or more is required if any of the following is used together with Flow Management Option.

- Print Management
- Scan Settings
- Cost Management

Required memory capacity for the operating environment of Entry Edition [Windows 8.1 / Windows 10]

Item	Description	
	2 GB or larger	4 GB or larger
None	Possible to perform	Possible to perform
If Cost Recovery Option is used	Impossible to perform	Impossible to perform
If Print On Demand Option is used	Impossible to perform	Impossible to perform
If Flow Management Option is used	Impossible to perform	Possible to perform

Operating Environment of Enterprise Edition

Item	Description
Supported Operating System ^{*1}	Windows Server 2016 Standard (64bit) ^{*2 *3 *4} Windows Server 2016 Datacenter (64bit) ^{*2 *3 *4} Windows Server 2012 R2 Standard (64bit) ^{*2 *4 *5} Windows Server 2012 R2 Datacenter (64bit) ^{*2 *4 *5} Windows Server 2012 Standard (64bit) ^{*2 *4}
CPU	Minimum: Intel® Xeon® E5506 2.13 GHz or equivalent (4 cores and above) ^{*6} Recommendation: Intel® Xeon® X3450 2.67 GHz or equivalent or higher (4 cores and above)
Hard disk capacity ^{*7 *8}	[When Flow Management Option is not added] System Drive: 20 GB or more Installation Drive: 10 GB or more Data Storage Drive: 70 GB or more [When Flow Management Option is added] System Drive: 35 GB or more

Item	Description
	Installation Drive: 15 GB or more Data Storage Drive: 100 GB or more
Memory capacity ^{*9}	4 GB or larger
Network	Protocol: TCP/IP
Display	XGA (1024 x 768 pixels and above), Full Colour
Web Service	Internet Information Services 10.0 Internet Information Services 8.5 Internet Information Services 8.0
Required hardware	DVD-ROM Drive
Required software	Microsoft .NET Framework 4.6 (for Microsoft SQL Server 2016) ^{*10} Microsoft .NET Framework 4.5.2 (except for Microsoft SQL Server 2016) ^{*10} Microsoft .NET Framework 3.5 [Service Pack 1] (for Windows Server 2016, Windows Server 2012 R2, Windows Server 2012) Microsoft SQL Server 2016 Standard (64bit) [Service Pack 2] Microsoft SQL Server 2016 Express (64bit) [Service Pack 2] Microsoft SQL Server 2014 Express (32bit) [Service Pack 3] Microsoft SQL Server 2012 Standard [Service Pack 4] ^{*11 *12} Microsoft SQL Server 2012 Express [Service Pack 4] ^{*11 *12}

- *1: Installation cannot be performed in the OS where domain controller is running.
Installation cannot be performed in the OS which supports Intel® Itanium® Processors.
If you want to create a PC in a virtual environment, assign the same resources as above "Hardware". Even if you assign the same resources as above "Hardware", you may see performance degradation depending on the operating circumstances of the host PC.
- *2: For 64-bit versions, ApeosWare Management Suite 2 software will run on WOW64 (Windows 32-bit on Windows 64-bit) emulation layer subsystem.
- *3: Nano Server Option is not supported. When installing the OS, do not select Nano Server Option.
- *4: Server Core Option is not supported. When installing the OS, do not select Server Core Option.
- *5: When installing and using Microsoft SQL Server 2016, it is necessary to apply Windows Updates KB2919442 and KB2919355 in advance to the OS.
- *6: Performance may be degraded when large amounts of data are handled.
- *7: If the same disk drive is used for multiple drives, the disk space required will be the sum of those drives.
- *8: Capacity is calculated for data of one month (8 hours/day x 20 days). Increase hard disk space or back up some operation logs to a different storage medium as needed.
- *9: 8 GB or more is required if any of the following is used together with Flow Management Option.
- Print Management
- Scan Settings
- Cost Management
- *10: Pre-installed version is supported if compatible newer Microsoft .NET Framework version is pre-installed on supported OS.
- *11: Apply Service Pack of same language as SQL Server. The SQL Server Express (x86) that comes bundled with the product package is the English Edition. Please apply the corresponding English Service Pack.
- *12: If your OS is 64-bit and SQL Server 2012 is 32-bit, after applying Service Pack, install the following 64-bit Microsoft SQL Server System CLR Types (x64) [File Name: ENU\x64\SQLSysClrTypes.msij] from Microsoft SQL Server 2012 Feature Pack.
- Microsoft SQL Server 2012 SP4 Feature Pack:
<https://www.microsoft.com/en-US/download/details.aspx?id=56041>

Operating Environment of Web Client

Item	Description
Supported Operating System	Windows 10 Pro (32bit) ^{*1} Windows 10 Pro (64bit) ^{*1} Windows 10 Enterprise (32bit) ^{*1} Windows 10 Enterprise (64bit) ^{*1} Windows 10 Education (32bit) ^{*1} Windows 10 Education (64bit) ^{*1} Windows 8.1 Pro Update (32bit) Windows 8.1 Pro Update (64bit) Windows 8.1 Pro (32bit) Windows 8.1 Pro (64bit) Windows Server 2016 Standard (64bit) Windows Server 2016 Datacenter (64bit) Windows Server 2012 R2 Standard (64bit) Windows Server 2012 Standard (64bit) macOS 10.15 Catalina macOS 10.14 Mojave macOS 10.13 High Sierra
Network	Protocol: TCP/IP
Web Browser ^{*2}	Internet Explorer Mozilla Firefox Google Chrome™ Safari (for macOS)

*1: Microsoft Edge is not supported.

*2: Please enable JavaScript™ and ActiveX Control. Please disable [Internet Explorer Enhanced Security Configuration] when using Internet Explorer in Windows Server 2012.

Operating Environment of Print Client (Microsoft Windows PC)

Item	Description
Supported Operating System	Windows 10 Home (32bit) Windows 10 Home (64bit) Windows 10 Pro (32bit) Windows 10 Pro (64bit) Windows 10 Enterprise (32bit) Windows 10 Enterprise (64bit) Windows 10 Education (32bit) Windows 10 Education (64bit) Windows 8.1 Pro Update (32bit) Windows 8.1 Pro Update (64bit) Windows 8.1 Pro (32bit) Windows 8.1 Pro (64bit) Windows Server 2019 Standard (64bit)

Item	Description
	Windows Server 2019 Datacenter (64bit) Windows Server 2016 Standard (64bit) Windows Server 2016 Datacenter (64bit) Windows Server 2012 R2 Standard (64bit) Windows Server 2012 Standard (64bit)
Network	Protocol: TCP/IP

Operating Environment of Print Client (Linux)

Item	Description
Supported Operating System	Red Hat® Enterprise Linux® 7 Vine Linux® 6.2 CR Ubuntu® 14.04 LTS CentOS 7.0
Network	Protocol: TCP/IP

Operating Environment of Print Client (Mac OS)

Item	Description
Supported Operating System	macOS 10.15 Catalina macOS 10.14 Mojave macOS 10.13 High Sierra macOS 10.12 Sierra OS X 10.11 El Capitan OS X 10.10 Yosemite OS X 10.9 Mavericks OS X 10.8 Mountain Lion Mac OS X 10.7.5 Lion Mac OS X 10.7.4 Lion Mac OS X 10.7.3 Lion
Network	Protocol: TCP/IP

Operating Environment of Print Client (iOS)

Item	Description
Required software	Print Utility for iOS 1.2 - 2.5

Operating Environment of Print Client (Android™)

Item	Description
Required software	Print Utility for Android 1.3 - 2.5

Operating Environment of user information self-registration feature

Item	Description
Web Browser *1	Internet Explorer 11
Required hardware	[Smart Card Reader *2] - PaSoRi RC-S320 - PaSoRi RC-S330 - PaSoRi RC-S340 - PaSoRi RC-S360 - PaSoRi RC-S370 - PaSoRi RC-S380

Note: The same operating environment as the Web Client is required for supported operating systems and networks.

*1: Only 32-bit Web browsers are supported.

*2: You must install FeliCa port software for the above smart card readers.

Operating Environment of AWMS Mobile (iOS)

Item	Description
Supported Operating System	iOS 13 iOS 12 iOS 11 iPadOS 13
Hardware	iPad (5th generation), iPad Air, iPad Air 2, iPad mini 2, iPad mini 3, iPad mini 4, 9.7-inch iPad Pro, 10.5-inch iPad Pro, 12.9-inch iPad Pro, 12.9-inch iPad Pro (2nd generation), 12.9-inch iPad Pro (3rd generation), iPhone 5s, iPhone 6, iPhone 6 Plus, iPhone 6s, iPhone 6s Plus, iPhone SE, iPhone 7, iPhone 7 Plus, iPhone 8, iPhone 8 Plus, iPhone X, iPhone XR, iPhone XS Max, iPod touch (6th generation)
Storage space	1 GB or larger (Free disk space available for users)

Operating Environment of AWMS Mobile (Android™)

Item	Description
Supported Operating System	Android™ 10 Android™ 9 Android™ 8 Android™ 7 Android™ 6 Android™ 5
Processor	ARM compatible processor
Screen resolution	1280 x 720 pixels and above
Screen Size	4.5 inches or more
Storage space	1 GB or larger (Free disk space available for users)

Operating Environment of Device Setup

Item	Description
Supported Operating System	Windows 10 Pro (32bit) ^{*1} Windows 10 Pro (64bit) ^{*1} Windows 10 Enterprise (32bit) ^{*1} Windows 10 Enterprise (64bit) ^{*1} Windows 10 Education (32bit) ^{*1} Windows 10 Education (64bit) ^{*1} Windows 8.1 Pro Update (32bit) ^{*1} Windows 8.1 Pro Update (64bit) ^{*1} Windows 8.1 Pro (32bit) ^{*1} Windows 8.1 Pro (64bit) ^{*1} Windows Server 2019 Standard (64bit) ^{*1} Windows Server 2019 Datacenter (64bit) ^{*1} Windows Server 2016 Standard (64bit) ^{*1} Windows Server 2012 Standard (64bit) ^{*1}
CPU	An x86 compatible CPU machine with Pentium® III 450 MHz or equivalent or higher
Hard disk capacity ^{*2}	200 MB or more free space
Memory capacity	256 MB or larger
Display	SVGA (800 x 600 pixels) and above (1024 x 768 pixels and above is recommended)
Web Browser	Internet Explorer 11
Device Setup Input Tool	Microsoft Excel 2010 (32bit) Microsoft Excel 2013 (32bit) Microsoft Excel 2016 (32bit) Supported Services: Address Book, Access Permissions, Mailbox, Job Flow Sheet

Note: For 64-bit versions, Device Setup software will run on WOW64 (Windows 32-bit on Windows 64-bit) emulation layer subsystem.

Note: You must install all patches provided by Microsoft with the following severity levels.

- Critical
- Important

Note: When upgrading Windows OS, please uninstall Device Setup beforehand. Then install Device Setup after upgrading.

*1: IPv6 address can be used for searching device, and communicating with device.

*2: 100 MB and above during operation, 200 MB and above during installation.

Operating Environment of Driver Distributor

Item	Description
Supported Operating System	Windows 10 Pro (32bit) Windows 10 Enterprise (32bit) Windows 10 Education (32bit)

Item	Description
	Windows 8.1 Pro Update (32bit) Windows 8.1 Pro (32bit)
CPU	Pentium® III 450 MHz or equivalent or higher
Hard disk capacity	400 MB or more free space
Memory capacity	256 MB or larger (1 GB and above is recommended)
Display	VGA (640 x 480 pixels) and above (SVGA (800 x 600 pixels) and above is recommended)
Required hardware	DVD-R Drive or CD-R Drive (to create distribution CD writing software is required)

Note: You must install all patches provided by Microsoft with the following severity levels.

- Critical
- Important

Operating Environment of Driver Distributor x64 Edition

Item	Description
Supported Operating System	Windows 10 Pro (64bit) Windows 10 Enterprise (64bit) Windows 10 Education (64bit) Windows 8.1 Pro Update (64bit) Windows 8.1 Pro (64bit)
CPU	Pentium® III 450 MHz or equivalent or higher
Hard disk capacity	400 MB or more free space
Memory capacity	256 MB or larger (1 GB and above is recommended)
Display	VGA (640 x 480 pixels) and above (SVGA (800 x 600 pixels) and above is recommended)
Required hardware	DVD-R Drive or CD-R Drive (to create distribution CD writing software is required)

Note: For 64-bit versions, Driver Distributor x64 Edition software will run on WOW64 (Windows 32-bit on Windows 64-bit) emulation layer subsystem.

Note: You must install all patches provided by Microsoft with the following severity levels.

- Critical
- Important

Operating Environment of Printer Check

Item	Description
Supported Operating System	Windows 10 Pro (32bit) Windows 10 Pro (64bit)

Item	Description
	Windows 10 Enterprise (32bit) Windows 10 Enterprise (64bit) Windows 10 Education (32bit) Windows 10 Education (64bit) Windows 8.1 Pro Update (32bit) Windows 8.1 Pro Update (64bit) Windows 8.1 Pro (32bit) Windows 8.1 Pro (64bit)
CPU	Pentium® III 450 MHz or equivalent or higher (1 GHz and above is recommended)
Hard disk capacity	15 MB or more free space
Memory capacity	256 MB or larger (1 GB and above is recommended)
Network Card	Yes
Display	VGA (640 x 480 pixels) and above (SVGA (800 x 600 pixels) and above is recommended)

Note: For 64-bit versions, Printer Check software will run on WOW64 (Windows 32-bit on Windows 64-bit) emulation layer subsystem.

Note: Must meet separate requirements for operating system.

Note: You must install all patches provided by Microsoft with the following severity levels.

- Critical
- Important

Operating Environment of Job Log Analyzer

Item	Description
Supported Operating System	Windows 10 Pro (32bit) Windows 10 Pro (64bit) ^{*1} Windows 10 Enterprise (32bit) Windows 10 Enterprise (64bit) ^{*1} Windows 10 Education (32bit) Windows 10 Education (64bit) ^{*1} Windows 8.1 Pro Update (32bit) Windows 8.1 Pro Update (64bit) ^{*1} Windows 8.1 Pro (32bit) Windows 8.1 Pro (64bit) ^{*1} Windows Server 2016 Standard (64bit) Windows Server 2012 R2 Standard (64bit) ^{*1} Windows Server 2012 Standard (64bit) ^{*1}
CPU	Pentium® III 1 GHz or equivalent or higher
Hard disk capacity	4 GB or more free space

Item	Description
Memory capacity	256 MB or larger
Display	XGA (1024 x 768 pixels and above)
Required hardware	DVD-ROM Drive
Required software	Microsoft Excel 2010 (32bit) ^{*2 *3} Microsoft Excel 2013 (32bit) ^{*2 *3} Microsoft Excel 2016 (32bit) ^{*2 *3} Microsoft Excel 2019 (32bit) ^{*2 *3}

Note: To custom install Microsoft Excel, Microsoft Visual Basic for Applications must be installed.

- *1: For 64-bit versions, ApeosWare Management Suite 2 software will run on WOW64 (Windows 32-bit on Windows 64-bit) emulation layer subsystem.
- *2: Only in Compatibility Mode.
- *3: Operation is guaranteed for the same language version of Microsoft Excel on each language version of operating system.

Operating Environment of Popup Messenger

Item	Description
Supported Operating System	Windows 10 Home (32bit)
	Windows 10 Home (64bit)
	Windows 10 Pro (32bit)
	Windows 10 Pro (64bit)
	Windows 10 Enterprise (32bit)
	Windows 10 Enterprise (64bit)
	Windows 10 Education (32bit)
	Windows 10 Education (64bit)
	Windows 8.1 Pro Update (32bit)
	Windows 8.1 Pro Update (64bit)
	Windows 8.1 Pro (32bit)
	Windows 8.1 Pro (64bit)
	Windows Server 2019 Standard (64bit)
	Windows Server 2019 Datacenter (64bit)
	Windows Server 2016 Standard (64bit)
	Windows Server 2016 Datacenter (64bit)
	Windows Server 2012 R2 Standard (64bit)
	Windows Server 2012 Standard (64bit)
	macOS 10.15 Catalina ^{*1}
	macOS 10.14 Mojave ^{*2}
	macOS 10.13 High Sierra
	macOS 10.12 Sierra
OS X 10.11 El Capitan	
OS X 10.10 Yosemite	
OS X 10.9 Mavericks	
OS X 10.8 Mountain Lion	

Item	Description
	Mac OS X 10.7 Lion Red Hat® Enterprise Linux® 7 Vine Linux® 6.2 CR Ubuntu® 14.04 LTS CentOS 7.0
Required hardware	Conforms to the operational conditions of the OS

*1: Popup Messenger version 2.1.3 or later is required.

*2: Popup Messenger version 2.1.2 ex1 or later is required.

Operating Environment of Diagnostics Utility

Item	Description
Supported Operating System	Windows 10 Pro (32bit) Windows 10 Pro (64bit) Windows 10 Education (32bit) Windows 10 Education (64bit) Windows 8.1 Pro Update (32bit) Windows 8.1 Pro Update (64bit) Windows 8.1 Pro (32bit) Windows 8.1 Pro (64bit) Windows Server 2016 Standard (64bit) Windows Server 2016 Datacenter (64bit) Windows Server 2012 R2 Standard (64bit) Windows Server 2012 R2 Datacenter (64bit) Windows Server 2012 Standard (64bit)
Required hardware	Conforms to the operational conditions of the OS
Required software	Microsoft .NET Framework 3.5 [Service Pack 1] Microsoft .NET Framework 3.5.1

Document management service available to link with ApeosWare Management Suite 2

Item	Description
Document Management Service	<ul style="list-style-type: none"> • Windows Shared Folder (SMB 2.0 or later) • FTP Server • Working Folder ^{*1 *2} • DocuShare 7.0 ^{*3 *4} • DocuShare CPX 7.0 ^{*3 *4} • DocuShare Express 7.0 ^{*3 *4} • DocuShare 6.6.1 Update 2 / Update 3 ^{*3 *5} • DocuShare CPX 6.6.1 Update 2 / Update 3 ^{*3 *5} • DocuShare Express 6.6.1 Update 2 / Update 3 ^{*3 *5} • Microsoft SharePoint Standard 2010 / 2013 ^{*3} • Microsoft SharePoint Enterprise 2010 / 2013 ^{*3}

Item	Description
	<ul style="list-style-type: none"> • Salesforce® Sales Cloud (Categories: Merchant / Opportunity / Library / Document)^{*3 *6} • RightFax 10.6^{*3} • Intelledox Infiniti 8.6.2.1 or later^{*3} • Google Drive™ • OneDrive for Business^{*3}

*1: Operations to Public Drawer and Private Drawer are supported. Operations to other drawers are not supported.

*2: Registration and search for Custom Attributes are not supported.

*3: Optional.

*4: DocuShare Options Server Common 7.0.11 must be installed.

*5: DocuShare Options Server Common 6.6.22 must be installed.

*6: WebAPI option will be required according to Sales Cloud edition.